

BIOSPECTRA

100 Majestic Way, Bangor, PA 18013 / www.biospectra.us

Effective Date:	30-Mar-2020	30-Mar-2023	: Date of Next Review
Prepared By:	Carissa McCollan	Not Applicable	: Supersedes
QA/QC Approval:	Kyle Snyder	Hannah Bernier	: Management Approval
Reason for Revision:	See Revision History in ensur.		

CERTIFICATE OF ANALYSIS

UREA

BIO ACTIVE GRADE / UR2220 – K050

LOT: UR2220-006-0320

NH₂CONH₂ ▲ F.W. 60.06 g/mol. ▲ CAS# 57-13-6
 Manufacture Date: 5/11/2018 Expiration Date: 5/31/2021
 Manufacturing Site: 100 Majestic Way, Bangor PA, 18013
 Packaging Date: 3/27/2020 Packaging Site: 100 Majestic Way, Bangor PA, 18013
 Meets or Exceeds USP Specifications

ANALYSIS	SPECIFICATION	TEST RESULT
Alcohol Insoluble Matter	0.04% max.	0.01%
Appearance and Color	White / Crystals	White / Crystals
Assay	98.0-102.0%	100.3%
Enzymes	DNase	None Detected
	RNase	None Detected
	Protease	None Detected
Heavy Metals	10 ppm max.	<10 ppm
Identification A (IR)	Passes Test	Passes Test
Identification B	Passes Test	Passes Test
Impurities	Urea RCA	< 0.1%
	Total	< 2.0%
	Unspecified	< 0.1%
Insoluble Matter	0.010% max.	<0.002%
Loss on Drying	1.0% max.	0.3%
Melting Range	132-135 °C	133 - 135 °C
Residue on Ignition	0.010% max.	<0.008%
Trace Metals	Arsenic (As)	5 ppm max.
	Copper (Cu)	5 ppm max.
	Iron (Fe)	5 ppm max.
	Lead (Pb)	5 ppm max.

COUNTRY OF ORIGIN: U.S.A.TEST METHOD REFERENCE: DCN: 16-000495CAUTION STATEMENT: Rx only. For manufacturing, processing, or repacking.

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INTENDED USE: Material represented by this Certificate of Analysis is suitable for use as a non-Sterile Active Pharmaceutical Ingredient manufactured in accordance with the ICH Q7 Good Manufacturing Practice Guide. The material represented by this Certificate of Analysis is not suitable to be used as a Sterile or Injectable Active Pharmaceutical Ingredient, Drug Product or Household Item.

RESIDUAL SOLVENTS: Based on the manufacturing process and the controlled handling, storage and analysis of this product, this product complies with the requirements and specifications listed in the current USP method <467> Tables 1, 2, 3, or 4.

Prepared by: Kyle Snyder Date: 3/30/20 Job Title: QA Specialist

Reviewed by: C. [Signature] Date: 3/30/20 Job Title: QA Supervisor